

## QuinTron BreathTracker Instrumentation

### ■ The Quintron instruments allow the ability to test for any of the following tests

- Small Intestinal Bacterial Overgrowth (SIBO)
- Lactose Intolerance
- Fructose Intolerance
- Sucrose Intolerance (Sucrase Deficiency)
- Glucose Intolerance
- d-Xylose breath test
- Lactulose breath test (commonly used for SIBO or Intestinal Transit Time)
- Sorbitol breath test

All Breath Tracker instruments have the ability to measure hydrogen ( $H_2$ ) in a single sample of alveolar air. There are also instruments that measure in addition methane ( $CH_4$ ) and/or carbon dioxide ( $CO_2$ ) in a single sample.

### Importance of $CH_4$ Analysis

Some methanogenic flora convert colonic  $H_2$  to  $CH_4$ . The  $H_2$  Breath test shows for these patients in any case negative results. Many of the false-negative reports can be avoided therefore by measuring methane in addition to hydrogen.

### Principle of $CO_2$ Measurement

If the alveolar air samples are diluted with room air, falsely low concentrations will be indicated. The Breath Tracker SC and H2+ instruments can be used to correct the analysis of trace breath-gases for such contamination. It is based on the concept that carbon dioxide ( $CO_2$ ) is present in alveolar air at a virtually constant concentration, while it is essentially absent in room air. Therefore, if alveolar air is erroneously mixed with room air, the concentration of  $CO_2$  will be reduced, as will that of any trace gases present in the sample. By knowing the degree to which the  $CO_2$  was diluted, it is possible to apply a correction to the analysis of the trace-gas as well, thus being able to calculate the true "alveolar" concentration of the sample which was contaminated.

### Advantage of the QuinTron BreathTracker™ instruments

- One-Year Warranty
- Results in less than 50sec.
- Fast accurate calibration
- Internal pump flushes out previous sample assuring no inter-Patient contamination or residual gas.
- Solid-state sensors never need regular replacement unlike fuel sensors
- Easy to operate

### Breath Tracker models

#### ■ Breath Tracker SC Catalogue No. QT05001-M

- Analysis of  $H_2$ ,  $CH_4$  and  $CO_2$  in alveolar air samples

#### Specification

- 230-240V/50Hz
- Resolution: 1 ppm  $H_2$  /  $CH_4$ ; 2 %  $CO_2$
- Accuracy:  $\pm 2-3$  ppm oder 5% of full scale for  $H_2$  und  $CH_4$ ;  $\pm 1\%$   $CO_2$
- Linear Range: 2-150 ppm  $H_2$ ; 2-75 ppm  $CH_4$ ; 0.1-7 %  $CO_2$

#### ■ Breath Tracker DP Catalogue No. QT05003-M

- Analysis of  $H_2$  and  $CH_4$  in alveolar air samples
- Can be easily upgraded to include analysis of  $CO_2$

#### Spezifikation

- 230-240V/50Hz
- Resolution: 1 ppm  $H_2$  and  $CH_4$
- Accuracy:  $\pm 2-3$  ppm oder 5% of full scale for  $H_2$  und  $CH_4$
- Linear Range: 2-150 ppm  $H_2$ ; 2-75 ppm  $CH_4$

■ **Breath Tracker H2+ Catalogue No. QT05005-M**

- Analysis of H<sub>2</sub> and CO<sub>2</sub> in alveolar air samples
- Can be easily upgraded to include analysis of CH<sub>4</sub>

**Spezifikation**

- 230-240V/50Hz
- Resolution: 1 ppm H<sub>2</sub>; 2 % CO<sub>2</sub>
- Accuracy: ± 2-3 ppm oder 5% of full scale for H<sub>2</sub>; ± 1% CO<sub>2</sub>
- Linear Range: 2-150 ppm H<sub>2</sub>; 2-75 ppm CH<sub>4</sub>; 0.1-7 % CO<sub>2</sub>

■ **Breath Tracker H2 Catalogue No. QT05007-M**

- Analysis of H<sub>2</sub> in alveolar air samples
- Can be easily upgraded to include analysis of CH<sub>4</sub> and/or the additional CO<sub>2</sub>

**Spezifikation**

- 230-240V/50Hz
- Resolution: 1 ppm H<sub>2</sub>
- Accuracy: ± 2-3 ppm oder 5% of full scale for H<sub>2</sub>
- Linear Range: 2-150 ppm H<sub>2</sub>

	SC	DP	H2+	H2
Breath Hydrogen Analysis	+	+	+	+
Breath Methane Analysis	+	+		
Sample Correction (CO2 Sensor)	+		+	
Simple Push Button Control	+	+	+	+
One-Year Warranty	+	+	+	+
Results in less than 50sec.	+	+	+	+
Solid state sensor	+	+	+	+

**Choosing the right Breath Collection Kit**

■ **AlveoSampler**

The AlveoSampler system is a disposable collection system used to collect alveolar air in a standard syringe for immediate analysis, and is the most commonly used sampling system.

Single-patient use of this device eliminates the danger of inter-patient cross-infection, and will save time and money related to the cost of cleaning and sterilizing reusable collection components.

This system can only be used in-house on any BreathTracker or MicroLyzer instrumentation. Each kit contains all the necessary supplies and substrate desired for collection.

■ **GaSampler**

The GaSampler system is used for the sampling and storing of alveolar air for immediate or later analysis. This system is designed only for in-house testing on any BreathTracker or MicroLyzer instrumentation.

This system can be used by non-technical personnel or even by the patient without supervision after an explanation of the procedure.

This system uses multiple parts which may be purchased separately or in a complete kit; all parts are sold as disposable except the multi-patient foil laminate collection bags which can be used multiple times over multiple patient collections if handled properly.



## ■ KidSampler

The KidSampler system is similar to the GaSampler, except it can utilize a mouthpiece or a face mask for pediatric collection. This system is designed only for in-house testing on any BreathTracker.

This system uses multiple parts which may be purchased separately or in a complete kit; all parts are sold as disposable except the multi-patient foil laminate collection bags which can be used multiple times over multiple patient collections if handled properly.

Other pediatric collection systems are available for babies and neonatal patients.

## ■ EasySampler

The patented EasySampler kit allows patients to collect samples off-site unsupervised for later analysis or can be used in-house as well, but is not recommended for patients who cannot follow basic directions.

Kits are provided with easy instructions and all necessary supplies for the patient to perform the test.

Each kit can be customized with your own literature and mailing labels.

This system can only be used with the purchase of a BreathTracker SC or H2+ analyzer and SamplXtractor™ system.

Samples can be stored for up to 14 days with minimal to no loss in sample integrity and are designed for easy and safe transport.